

(12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(19) World Intellectual Property
Organization
International Bureau



(43) International Publication Date
2 June 2005 (02.06.2005)

PCT

(10) International Publication Number
WO 2005/049631 A1

(51) International Patent Classification⁷: **C07H 15/04**,
15/207, A61K 31/7004, 31/7016, A61P 29/00, 17/00,
11/06

(21) International Application Number:
PCT/NZ2004/000293

(22) International Filing Date:
18 November 2004 (18.11.2004)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:
529603 18 November 2003 (18.11.2003) NZ
533245 31 May 2004 (31.05.2004) NZ

(71) Applicants (for all designated States except US):
**THE MALAGHAN INSTITUTE OF MEDICAL
RESEARCH** [NZ/NZ]; a New Zealand non-profit or-
ganisation of Mein Street, Newtown, Wellington (NZ).
UNIVERSITY OF OTAGO [NZ/NZ]; a body corporate
established under the University of Otago ordinance 1869,
Leith Street, Dunedin (NZ). **AGRESEARCH LIMITED**
[NZ/NZ]; a New Zealand company and Crown Research
Institute under the Crown Research Institutes Act 1992,
Tower Block - 5th Floor, Ruakura Research Centre, East
Street - Hamilton (NZ).

(72) Inventors; and

(75) Inventors/Applicants (for US only): **SINGH-GILL**,
Gurmit [IN/NZ]; c/o Chemistry Department, University
of Otago, Leith Street, Dunedin (NZ). **LARSEN**, David
Samuel [NZ/NZ]; c/o Chemistry Department, University
of Otago, Leith Street, Dunedin (NZ). **JONES**, Jeremy

David [NZ/NZ]; c/o Chemistry Department, University
of Otago, Leith Street, Dunedin (NZ). **SEVERN**, Wayne
Bruce [NZ/NZ]; 1 Seddon Street, Upper Hutt (NZ).
HARPER, Jacqui Lucille [NZ/NZ]; 35 Maungaraki
Road, Korokoro, Lower Hutt (NZ).

(74) Agents: **CALHOUN**, Douglas, C et al.; A J Park, 6th
Floor Huddart Parker Building, Post Office Square, P O
Box 949, Wellington, 6015 (NZ).

(81) Designated States (unless otherwise indicated, for every
kind of national protection available): AE, AG, AL, AM,
AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN,
CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI,
GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE,
KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD,
MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG,
PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM,
TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM,
ZW.

(84) Designated States (unless otherwise indicated, for every
kind of regional protection available): ARIPO (BW, GH,
GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM,
ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM),
European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI,
FR, GB, GR, HU, IE, IS, IT, LU, MC, NL, PL, PT, RO, SE,
SI, SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ,
GW, ML, MR, NE, SN, TD, TG).

Published:

— with international search report

For two-letter codes and other abbreviations, refer to the "Guid-
ance Notes on Codes and Abbreviations" appearing at the begin-
ning of each regular issue of the PCT Gazette.

(54) Title: SYNTHETIC MOLECULES HAVING IMMUNE ACTIVITY

(57) Abstract: The present invention is directed to synthetic molecules having biological activity similar to PIM (acyl glycerol phos-
phatidylinositol manno-oligosaccharide) activity, for use in the treatment and prevention of inflammatory or immune cell mediated
diseases or disorders.

WO 2005/049631 A1